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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,086

10/31/2005

Didier Gaget

Serie 6037

7524

7590

05/12/2008

Air Liquide
Intellectual Property Department
Suite 1800
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EXAMINER

PRICE, CRAIG JAMES

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,086	Applicant(s) GAGET ET AL.	
	Examiner Craig Price	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/1/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the four positions (Claims 11 and 19) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. **Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d).** If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15 – 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 15 recites the limitation “sliding walls define

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the zones”, this is unclear as it seems that the sliding walls provide communication between the zones as the slide moves from one position to another. The zones appear to be defined by their own location chamber or outlet. Furthermore, within claim 15, the limitation “a slide for sliding partition walls” is unclear, as the specification defines 7 and 8 to be partition walls, therefore it is unclear as to how these walls would slide?

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (DE 19740392).

Muller discloses an apparatus which may be used as a fluid distribution and control valve, the apparatus comprising, a valve body (1) comprising at least four internal zones (the area in the bores between 6-9 and the ball valve 2), wherein, the internal zones comprise a first zone (bore 7), and the first zone is connectable to a user fluid circuit (the circuit connected beyond 7), at least four fluid passages (the outlets of the bores 6-9), wherein each the fluid passage connects a corresponding the zone to an external fluid circuit, and a mobile structure (2), wherein, the mobile structure can be moved into at least four positions and depending upon the movement of the mobile structure fluid communication is established between at least two the zones (as shown

in Figures 1 and 2), at least two other the zones are isolated from each other, and the first zone is selectively brought into communication with at least one other the zone (as shown in Figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11,12,13,15-18 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maskell (GB 1,022,574) in view of Muller DE 19740392.

Maskell discloses a breathing system having a first or main oxygen source (7) and the second or emergency oxygen (14) pressurized fluid sources which supply the user fluid circuit (1) sequentially based on a loss in pressure in the low pressure source (Col. 3, Lns. 50 – Col. 4, Lns. 71).

Maskell is silent to having a second zone, wherein the second zone is

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connectable to a first pressurized fluid source, and a third zone, wherein the third zone is connectable to a second pressurized fluid source, and a fourth zone, wherein the fourth zone is connectable to a vent circuit, and a slide for sliding partition walls and the sliding walls define the zones, and, wherein the apparatus has an internal layout which is symmetrical with respect to a center plane and the center plain is substantially perpendicular to the mobile structure, and wherein the first zone and the fourth zone are arranged, about the center plane, and on either side of the mobile structure, and comprising a pair of intermediate chambers, wherein the intermediate chambers are in permanent communication with the first zone.

Muller discloses a sequentially operated valve which teaches the use of the second zone (bore 6) which is connectable to a first pressurized fluid source, and a third zone (bore 9), wherein the third zone is connectable to a second pressurized fluid source, and a fourth zone (bore 8), wherein the fourth zone is connectable to a vent circuit, and a slide (2) for sliding partition walls and the sliding walls define the zones, wherein the apparatus has an internal layout which is symmetrical with respect to a center plane and the center plain is substantially perpendicular to the mobile structure (as shown in Figure 1, the valve is symmetrical), and wherein the first zone and the fourth zone are arranged, about the center plane, and on either side of the mobile structure (as shown in figure 1, they are on either side of the structure), and comprising a pair of intermediate chambers (bores 4), wherein the intermediate chambers are in permanent communication with the first zone.

It would have been obvious to one of ordinary skill in the art at the time of invention to substitute a valve as taught by Muller into the device of Maskell in order to have a manual valve which would not be subjected to an automatic spring device which may be prone to failure.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller DE 19740392 in view of Baker (4,501,297).

Muller is silent to having the mobile structure being connected to a positioning servomotor.

Baker discloses a rotary valve which teaches the use of a servomotor (18).

It would have been obvious to one of ordinary skill in the art at the time of invention to employ a servomotor as taught by Baker into the device of Muller in order to control the valve from a remote location.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Monroe (2,167,281), Christensen (2,414,451), Jordan (2,553,458), Johnson (2,526,361), Clifton (2,648,313), Vltavsky (2,843,093), Holbrook (3,202,170), Kramer (3,202,886), Johnson (3,254,675), Smith, Jr. et al. (3,299,906), Browne (3,741,237), Chiba et al. (3,472,281), Fisher (3,477,344), Knutson (3,756,282), Ensign (4,176,687), Loveless (4,187,884), Contartese et al. (4,513,782) and Zenner et al. (4,649,956) all disclose similar valves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571)272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP
/C. P./
Examiner, Art Unit 3753

5 May 2008

/John Rivell/
Primary Examiner, Art Unit 3753